

GreenCOM Update

A quarterly report from USAID's Environmental Education & Communication Project ♦ October 1998

Panama: Keeping Water in the Canal

On the last day of the millennium, the Panama Canal will pass from U.S. to Panamanian control.

While it connects oceans, the Canal's lifeblood is fresh water from a watershed increasingly threatened by human activities.

In the original Canal Treaty, Panamanian officials mention the need to protect the watershed to ensure the viability of the canal. Yet few Panamanians today are aware of the relationship between the watershed and the Canal.

USAID/Panama has therefore asked GreenCOM to mount an information campaign over the next two years. GreenCOM will work with various Panamanian public, private, and non-governmental institutions to foster understanding of the function and importance of the Panama Canal Watershed—and support for the Panamanian institutions responsible for safeguarding it.

The target groups for these messages include:

- ◆ Government of Panama institutions
- ◆ Municipal agencies
- ◆ Private-sector entities
- ◆ Non-governmental organizations, community-based organizations, and households residing in or near the watershed.

The Academy for Educational Development's (AED's) long experience in large-scale communication interventions shows that it takes at least two years to create popular understanding and awareness adequate for a large population to make measurable changes in behavior.

GreenCOM's first goal is therefore broad awareness of the Canal and its water needs. Subsequent projects will address specific behaviors to protect the watershed.



A fisher's harvest from a freshwater lake in Panama

Egypt: Increasing Water Awareness on the Farm

The Nile River blessed Egypt with abundant water for millennia. But with the building of the Aswan High Dam, Egypt agreed to limit its water use and share the Nile with its neighbors. While the country's water quota is fixed by treaty, its population is growing at nearly three percent a year—a recipe for shortage. “New” water can come only from increasing water efficiency—making each drop go farther.

Since agriculture uses 86 percent of Egypt's water allotment, water-thrifty farming holds the promise of considerable water savings. The Egyptian Ministry of Public Works and Water Resources (MPWWR) asked GreenCOM to design a communications program to reach farmers, starting with baseline surveys to find out what they know, believe, and do about water.

Last quarter, GreenCOM surveyed Egyptian male and female farmers. As it turns out, knowledge and awareness are low: only 48 percent of male farmers and 12 percent of female farmers know that Egypt has a fixed water supply. Only 40 percent of male, and 15 percent of female, farmers know that Egypt faces water scarcity now or in the future.

The survey also found that 64 percent of farmers say they lack adequate water for irrigation in the summer. Yet only 23 percent of male farmers and 17 percent of female farmers know that irrigating water at night saves water.

This baseline will help GreenCOM design communications campaigns to let farmers know about water-saving techniques, including night irrigation, crop varieties that use less water, and careful leveling of land.



This report uses a tabloid format and cost-minimizing production methods. It is printed on recycled, post-consumer waste paper and was produced entirely in-house at AED using desktop-publishing software and photocopying equipment.



Three of ten new stamps celebrating Nicaragua's protected areas

Lick a Stamp, Save a Tree in Nicaragua

Last quarter, GreenCOM/Nicaragua and USAID/Nicaragua brokered an arrangement with the Nicaraguan Postal Service and Fundación Cocibolca, a leading environmental NGO, to produce a series of 10 stamps featuring photographs of eight protected areas. The images are those that GreenCOM used on posters, brochures, and a tourist guide for the Nicaraguan protected-areas system.

In an international first, the Postal Service agreed to donate a percentage of the revenues from stamp sales to the foundation to finance environmental education. The first printing ran to 950,000 stamps, with the potential to generate approximately \$27,000 for the foundation.



Nicaraguan President Arnoldo Alemán cancels the first nature stamps. Left to right: U.S. Ambassador to Nicaragua, Lino Gutiérrez, the Nicaraguan President, and Ms. Alemán.

The President of Nicaragua, Arnoldo Alemán, canceled the first stamps at a gala event August 20th at the National Palace of Culture in Managua. Organized by GreenCOM, the event gathered more than 350 representatives from the environmental,

development, and diplomatic communities as well as the private sector. In addition to the nation's president, guests included the Minister of Environment, Roberto Stadthagen Vogl, the U.S. Ambassador to Nicaragua, Lino Gutiérrez, and Mario Montenegro, Director-Minister of TELCOR. The event garnered television and newspaper coverage.

GreenCOM and USAID/Nicaragua have just learned that the Postal Service and the Foundation have agreed to a three-year arrangement. This effort will publicize more of Nicaragua's protected areas and generate modest funding for EE activities.

Fez Sustainable Cities Project Evaluated

In 1996, GreenCOM held a ten-day, participatory workshop in Fez, Morocco, with the aim of improving waste collection in two neighborhoods as well as increasing the capacity of neighborhood associations to address urban problems.

The stakeholder representatives came up with an action plan for improving waste collection, supporting community associations, and bringing women into the decision-making process.

Last quarter, Orlando Hernández, returned to Fez with consultant Ahmed Bouziane to evaluate the project's impact. His major findings include:

- ◆ The initial workshop inspired neighborhood cleanups.
- ◆ For awhile, residents reported neighbors who continued illegal dumping.
- ◆ Partly because of their initiative in waste management following the workshop, two neighborhood men were elected to the municipal council. There they were able to get the government to subsidize neighborhood waste collection, extend the area served, and agree to purchase small waste-collection trucks.
- ◆ One resident organized a citizen brigade to build a bridge and improve access roads so the trucks can reach the neighborhoods. He also leveraged funds from businesses to support other urban improvements.

One lesson learned: make sure that when action plans are designed, each stakeholder, including donors, clearly commits to specific items. Although a number of small improvement projects—e.g., converting dump sites into green areas and playgrounds—were planned during the initial workshop,

many were never implemented.

Another lesson: where women are not allowed to attend meetings with men, their input can still be obtained. In this case, female facilitators held women-only group discussions that disclosed the reasons for much of the illegal dumping: erratic schedules of waste-disposal trucks.

Jordan: GLOBE Start-up Ends

"Every one of us wants to be a scientist now," said one young man who participates in the GLOBE program at the Salt Pioneer Centre in Jordan.

Mary Sebold visited Jordan in October to report on GreenCOM's year-long start-up of GLOBE/Jordan, which included supplying six computers and six scientific kits to schools, and training to key administrators. She toured the Salt school with Raouf Dabbas, president of the Friends of the Environment Society (FOES), the Jordanian national coordinating body for GLOBE. With GreenCOM consultant Khulood Tubaishat, Sebold also met with teachers and FOES volunteers throughout the country.

Adults and students alike emphasized their enthusiasm for the GLOBE program, which allows adolescents to gain understanding of the Earth by measuring and analyzing environmental phenomena like temperature, precipitation, and soils. High school students also improve their English-language skills by communicating with schools and GLOBE scientists throughout the world on the Internet.

The Salt School is an after-hours program for gifted Jordanian students in the Salt-Amman area. An English teacher, whom GreenCOM and FOES volunteers trained in GLOBE protocols, administers the program to 33 students. Her students submitted 1,102 data reports to the GLOBE website--more than any other school in Jordan or neighboring Israel.

During Sebold's visit, the young women were particularly talkative. "It is important to know our environmental problems," said one, "and think about ways to solve them for Salt, Jordan and the Arab World. [GLOBE] has pushed me to keep my environment [clean] at home and on my street." She and her classmates plan to visit a nearby cement factory to discuss the dangers of air pollution with the owners.

A teacher from one of the other 16 GLOBE schools in Jordan observed that his students now worked in the greenhouses with more knowledge of chemicals and that they hoped to communicate with



GLOBE/Jordan students record measurements

Moldova on an agricultural project.

Sebold reflects: "From viewing the results of GLOBE/Jordan—and seeing the faces of the student scientists—I'm convinced that it's imperative to continue the project." Currently, FOES and teachers are investigating ways to improve Internet access, upgrade computer hardware, and find reliable sources for scientific equipment and necessary chemicals. School and NGO leaders are seeking private and public monies to ensure GLOBE's future and appreciation of the environment among Jordan's next generation.

GreenCOM Online

Last quarter, Reva Schwartz completely revamped the GreenCOM website. Visually exciting and user-friendly, the site now includes descriptions of all our projects, plus the full text of many GreenCOM publications, including the *GreenCOM Update* and *Human Nature*. You can find us online at <http://www.info.usaid.gov/environment/greencom/>.

GreenCOM Presentations and Visitors

Three GreenCOM members presented papers at the North American Association for Environmental Education (NAAEE) 1998 annual conference in Atlanta, Georgia in September. Brian A. Day gave a workshop titled "Knowledge, Attitudes, and Perceptions of Irrigation Engineers in Egypt: GreenCOM." Mary Sebold spoke on "Developing Campaigns to Promote Water Conservation in the Middle East." And Orlando Hernández gave a presentation entitled "Developing an Environmental Intervention to Promote Turtle Conservation Behaviors in Nicaragua."

In Washington in early October, Peter Spain, Peter Templeton, and Paulina Espinosa presented the GreenCOM philosophy, methodology, and resource center to a dozen students from American University's Washington Semester and World Capitals Programs. Spain explained that GreenCOM represents the first effort to apply to environmental work the behavioral change techniques developed by AED in the health fields. The methods are distinguished by, among other techniques, their emphasis on developing communications campaigns through systematic research and listening to all stakeholders.

Also in early October, Brian A. Day spoke about environmental education and communication with seven young Africa leaders on a study tour. Paulina Espinosa guided them through the resource center.

Other visitors welcomed by GreenCOM this quarter include Mason Bryant Howard and Jonathan Padwe, representatives from EcoPact, an NGO working in Latin America.

Home Office News

In August, Bruce Clark, formerly Financial Associate, became GreenCOM's Financial Manager. A veteran of more than ten years at AED, Bruce has worked in the accounting department, with informa-

tion technology, ABEL, and the Tunisia Procurement Project. He joined GreenCOM in '96.

Moctar Toumbou became GreenCOM's new Financial Associate. Originally from Mauritania, Toumbou holds a B.A. from the University of Dakar in economics and a master's degree in economics from the University of Southern Illinois. He worked with refugees at the Red Cross in Guinea/Conakry, and for the International Foundation for Election Systems in Washington DC before joining GreenCOM.

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